IN THE CLAIMS

All the claims of the present application are presented below:

1.   (Withdrawn)   A computer-assisted method for determining a dimension of an anatomical feature using two or more fluoroscopic images, the method comprising:

displaying a first fluoroscopic image taken of an anatomical feature taken from a first pose, the first image being registered to a common three-dimensional coordinate system;

receiving indication of position of at least a first point and a second point within first image corresponding respectively to at least two anatomical landmarks shown within first image;

displaying a second fluoroscopic image taken of the anatomical feature from a second angle, the second image being registered to the known three-dimensional coordinate system;

indicating with reference to the second image where the anatomical landmarks lie along each of two lines of sight defined by the first and second points within the three-dimensional coordinate system; and

determining distance of a line specified by the first and second points.

2.   (Withdrawn)   The method of claim 1, further comprising:

placing within the field of view of each fluoroscopic image a plurality of fiducials having known positions with respect to each other;

receiving an input to identify two-dimensional coordinates of each of the plurality of fiducials displayed on each of the images; and

registering the images by creating a geometric model having parameters, said model projecting three-dimensional coordinates of the plurality of fiducials into the identified coordinates of the fiducials on the images, and numerically optimizing the parameters of the geometric model such that the projections of the known three-dimensional coordinates of the fiducials best fit the identified two-dimensional coordinates in each of the images.
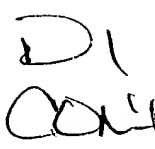
3.   (Withdrawn)   The method of claim 1 wherein the lines of site are indicated on the second image by lines drawn on the second image.

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4. (Withdrawn) An apparatus for determining a dimension of an anatomical feature using two or more fluoroscopic images, comprising:

means for displaying a first fluoroscopic image taken of an anatomical feature taken from a first pose, the first image being registered to a common three-dimensional coordinate system;

means for receiving indication of position of at least a first point and a second point within first image corresponding respectively to at least two anatomical landmarks shown within first image;

means for displaying a second fluoroscopic image taken of the anatomical feature from a second angle, the second image being registered to the known three-dimensional coordinate system;

means for indicating with reference to the second image where the anatomical landmarks lie along each of two lines of sight defined by the first and second points within the three-dimensional coordinate system; and

means for determining distance of a line specified by the first and second points.

5. (Withdrawn) A computer readable storage medium on which is recorded program instructions that, when read and executed by a computer, cause the computer to undertake the following steps:

displaying a first fluoroscopic image taken of an anatomical feature taken from a first pose, the first image being registered to a common three-dimensional coordinate system;

receiving indication of position of at least a first point and a second point within first image corresponding respectively to at least two anatomical landmarks shown within first image;

displaying a second fluoroscopic image taken of the anatomical feature from a second angle, the second image being registered to the known three-dimensional coordinate system;

indicating with reference to the second image where the anatomical landmarks lie along each of two lines of sight defined by the first and second points within the three-dimensional coordinate system; and

determining distance of a line specified by the first and second points.

6 –24. (Cancelled)

25.   (Withdrawn) Apparatus for determining the rate of velocity and/or acceleration of an object in a human body, comprising;

means for displaying a plurality of fluoroscopic images registered to a known frame of reference taken at successive time intervals;

means for receiving an indication with respect to the fluoroscopic images of a position of an object of interest in each of the images;

means for determining with respect to the frame of reference the position of the object at the success time intervals based on the indications of the position of the object on each of the plurality of fluoroscopic images; and

means for calculating a time derivative of the positions of the object.

26.   (Withdrawn) A computer readable storage medium storing program instructions that, when read and executed by a computer, cause the computer to undertake the following:

displaying a plurality of fluoroscopic images registered to a known frame of reference taken at successive time intervals;

receiving an indication with respect to the fluoroscopic images of a position of an object of interest in each of the images;

determining with respect to the frame of reference the position of the object at the success time intervals based on the indications of the position of the object on each of the plurality of fluoroscopic images; and

calculating a time derivative of the positions of the object.

27.   (New) A computer-assisted method for determining a dimension of an anatomical feature of a patient within an area of interest, comprising:

displaying a first fluoroscopic image taken of an anatomical feature of interest from a first angle and a second fluoroscopic image of the anatomical feature of interest taken from a second angle, the first and second images being registered with respect to a common three-dimensional coordinate system;

defining at a known position and orientation in the three-dimensional coordinate system, within the area of interest of the patient, a virtual surgical object, the surgical object having one or more dimensions;

displaying in the first and second fluoroscopic images graphical representation of the virtual surgical object projected into the first and second fluoroscopic images;

adjusting the virtual surgical object such that that graphical representations of the virtual surgical object fit the anatomical feature of interest shown in at least one of said first and second images; and

providing a dimension of the anatomical feature of interest based on the one or more dimensions of the virtual surgical object.

28.   (New) The method of claim 27, further comprising selecting an implant or surgical device for insertion into said patient based at least in part on said determined dimension of the anatomical feature.

29.   (New) The method of claim 28, wherein said surgical object comprises a three-dimensional object.

30.   (New) The method of claim 29, wherein said three-dimensional object comprises a three dimensional representation of a stent.

31.   (New) The method of claim 27, wherein said adjusting step comprises adjusting a dimension of the virtual surgical object to fit the anatomical feature of interest shown in at least one of said first and second images.

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32.   (New) The method of claim 31, wherein the adjusting a dimension of the virtual surgical object includes adjusting the virtual surgical object's shape.

33.   (New) The method of claim 27, wherein said adjusting step comprises adjusting an orientation of the virtual surgical object to fit the anatomical feature of interest shown in at least one of said first and second images.

34.   (New) The method of claim 27, wherein said adjusting step comprises adjusting a position of the virtual surgical object to fit the anatomical feature of interest shown in at least one of said first and second images.